

To: Andrzej S Tarnawski, DSc, MD, PhD, Professor

Editor in Chief, World Journal of Gastroenterology

Ref.

Manuscript NO: 80621

The role of advanced imaging techniques in the evaluation of oncological therapies in patients with colorectal liver metastases

Enclosed You will find the revision materials of our manuscript; as requested, you will find a specific replay to Reviewers comments, a revised version of the manuscript with track changes enabled.

We would like to express our gratitude to Reviewers for their kind remarks and insightful comments that have helped us improve our manuscript.

We hope that now the manuscript is suitable for publication in World Journal of Gastroenterology.

Sincerely Yours,

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Reviewer 1

Kindly add the numbers of references immediately after the names of authors, not at the end of paragraphs.....apply that to the whole manuscript.

As suggested, the numbers of references have been added immediately after the names of authors in the whole manuscript.

Reviewer 2

1. The title can be modified “The role of advanced imaging techniques in the evaluation of oncological therapies in patients with colorectal liver metastases”

As suggested, we have modified the title of the manuscript.

2.The authors present an interesting revision of clinical interest. The subject falls within the scope of the journal. Some concerns should be addressed before considering the publication of this study. Some suggestions were made and were drawn in yellow in attach file.

We all thank the reviewer for appreciating and reviewing our manuscript, suggesting insightful comments.

3. Expand the topic PA BASED ON RADIOMICS The texture features were gray-level co-occurrence matrix (GLCM) and gray-level run length (GLRL). Some features were extracted after a pre-processing with a Wavelet's transform. The supervised classification was achieved with machine learning (ML) approaches: support vector machine (SVM), k-nearest neighbors (kNN), and Random Forest. Texture analysis (TA) is described as techniques that enable to quantify the variations in pixel intensity including some imperceptible to the human visual system. TA includes the quantification of the gray-level patterns, pixel interrelationships, and the spectral properties of an image. Include the following references in the paper: Alves AFF, et al. Inflammatory lesions and brain tumors: is it possible to differentiate them based on texture features in magnetic resonance imaging? J Venom Anim Toxins Incl Trop Dis. 2020 Sep 4;26:e20200011. Kassner A, Thornhill RE. Texture analysis: A review of neurologic MR imaging applications. Am J Neuroradiol. 2010;31(5):809–816.

We have expanded the topic “PA BASED ON RADIOMICS” including the suggested references.

4. Include the topic: Spectroscopy (including the following references) Ljungberg M, et al.. 31P MR spectroscopy to evaluate the efficacy of hepatic artery embolization in the treatment of neuroendocrine liver metastases. Acta Radiol. 2012 Dec 1;53(10):1118-26. ter Voert EG, et al. In vivo magnetic resonance spectroscopy of liver tumors and metastases. World J Gastroenterol. 2011 Dec 21;17(47):5133-49. This reference is mentioned, but the authors should include a topic discussing spectroscopy Uutela A, et al. RAXO Study Group. Treatment response of colorectal cancer liver metastases to neoadjuvant or conversion therapy: a prospective multicentre follow-up study using MRI, diffusion-weighted imaging and 1H-MR spectroscopy compared with histology (subgroup in the RAXO trial). ESMO Open. 2021 Aug;6(4):100208.

As suggested, we have added a topic “PA BASED ON SPECTROSCOPY” after the topic “PA BASED ON MRI DIFFUSION TECHNIQUE”.